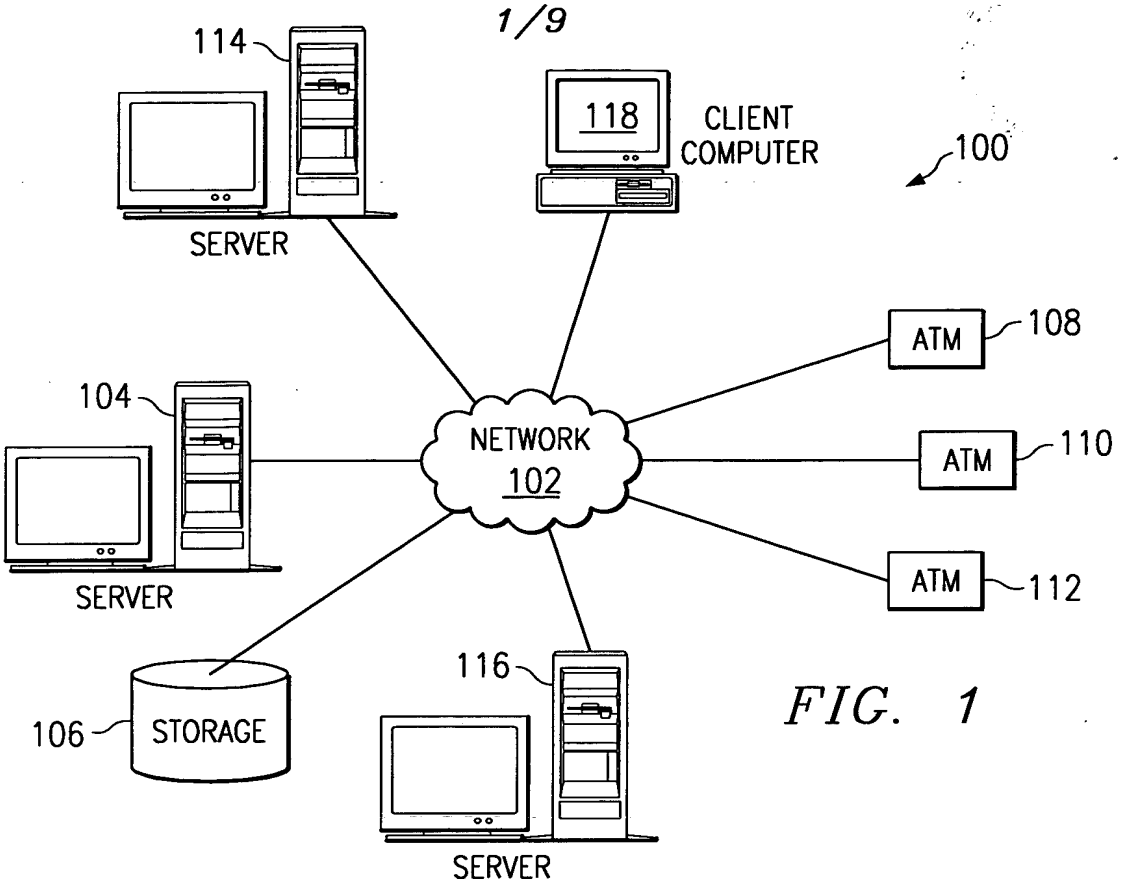

114
SERVER
118
CLIENT COMPUTER
100
ATM
108
104
NETWORK
102
ATM
110
SERVER
ATM
112
116
106
STORAGE
SERVER

FIG. 1

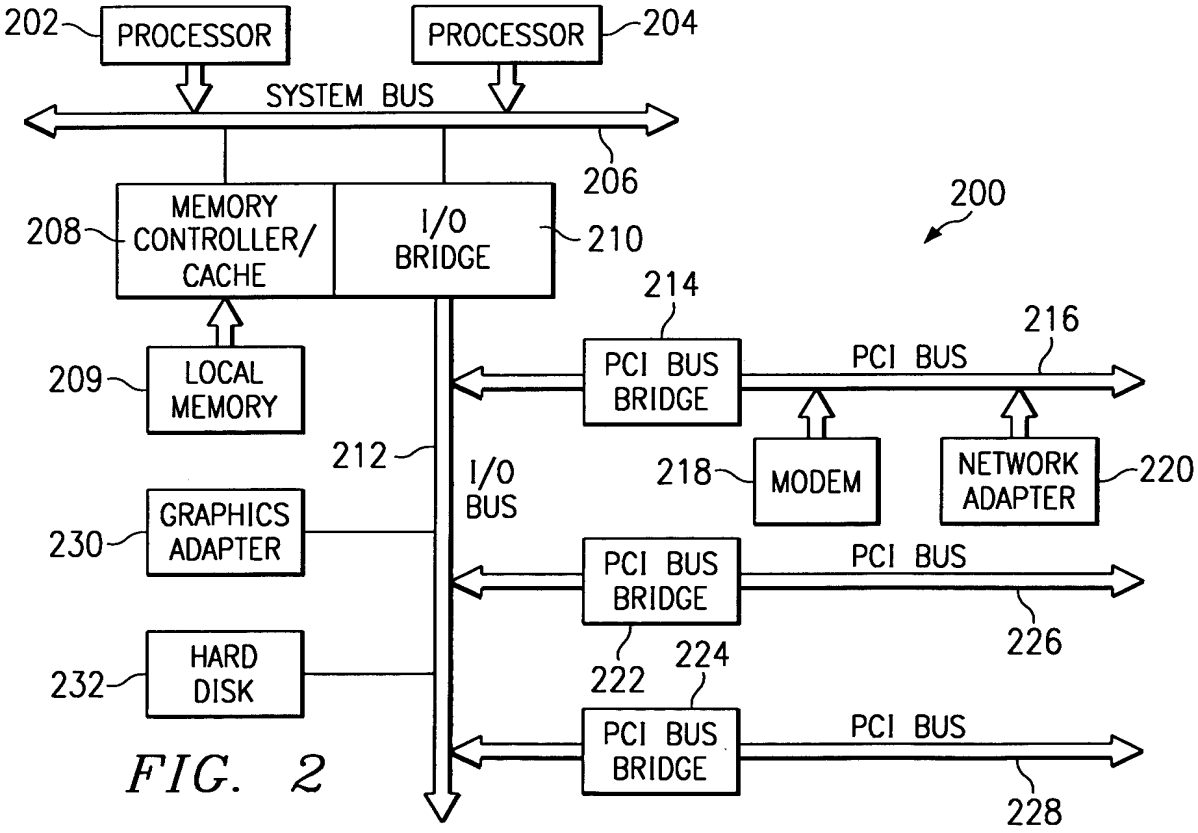

202
PROCESSOR
PROCESSOR
204
SYSTEM BUS
206
208
MEMORY CONTROLLER/ CACHE
I/O BRIDGE
210
200
214
216
209
LOCAL MEMORY
PCI BUS BRIDGE
PCI BUS
212
I/O BUS
218
MODEM
NETWORK ADAPTER
220
230
GRAPHICS ADAPTER
PCI BUS BRIDGE
PCI BUS
226
232
HARD DISK
222
224
PCI BUS BRIDGE
PCI BUS
228

FIG. 2

FIG. 3

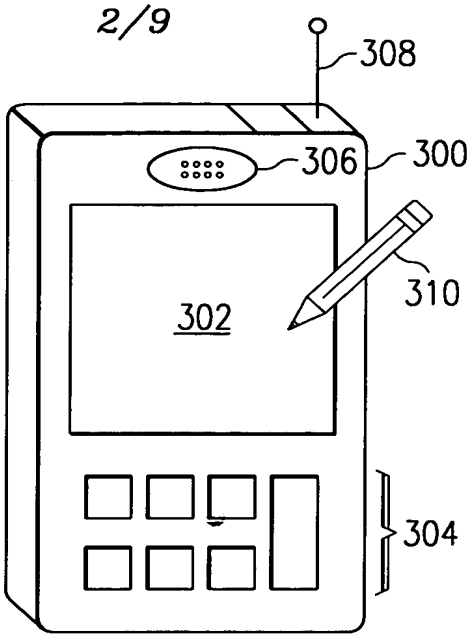


FIG. 4

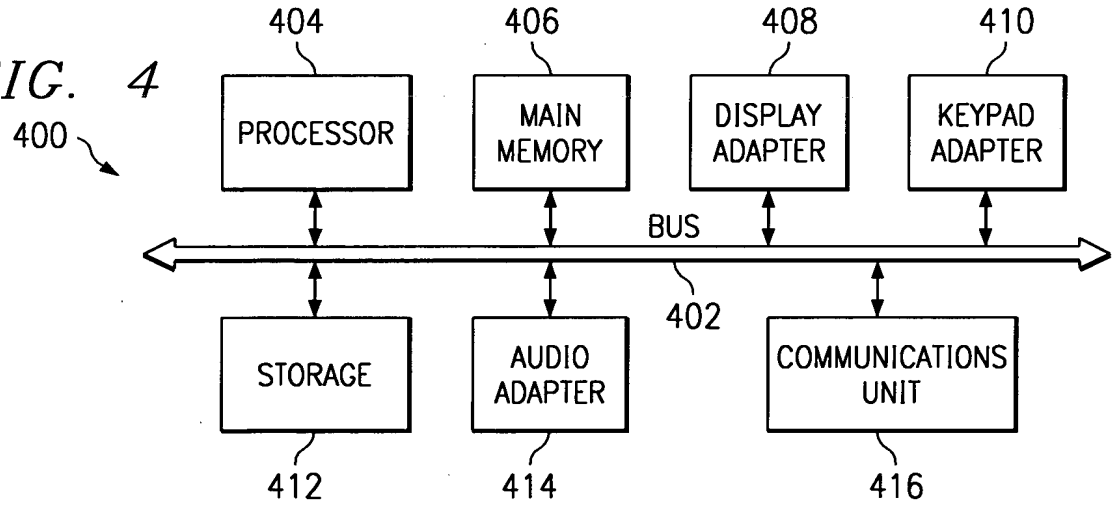
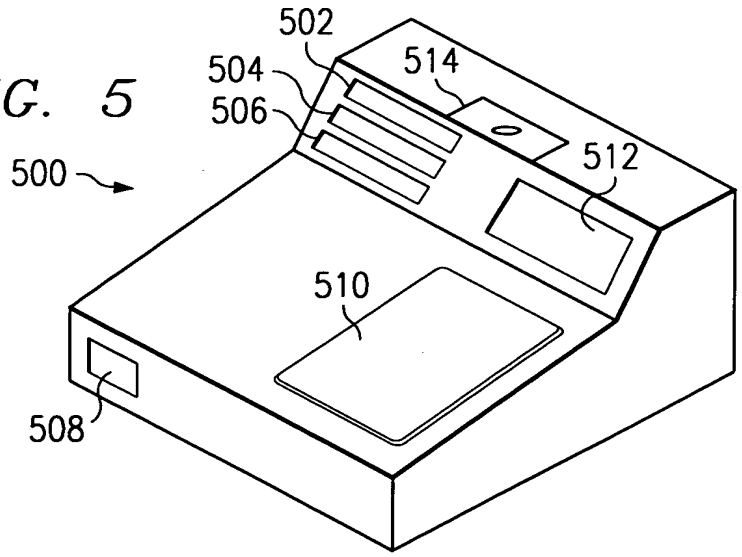


FIG. 5



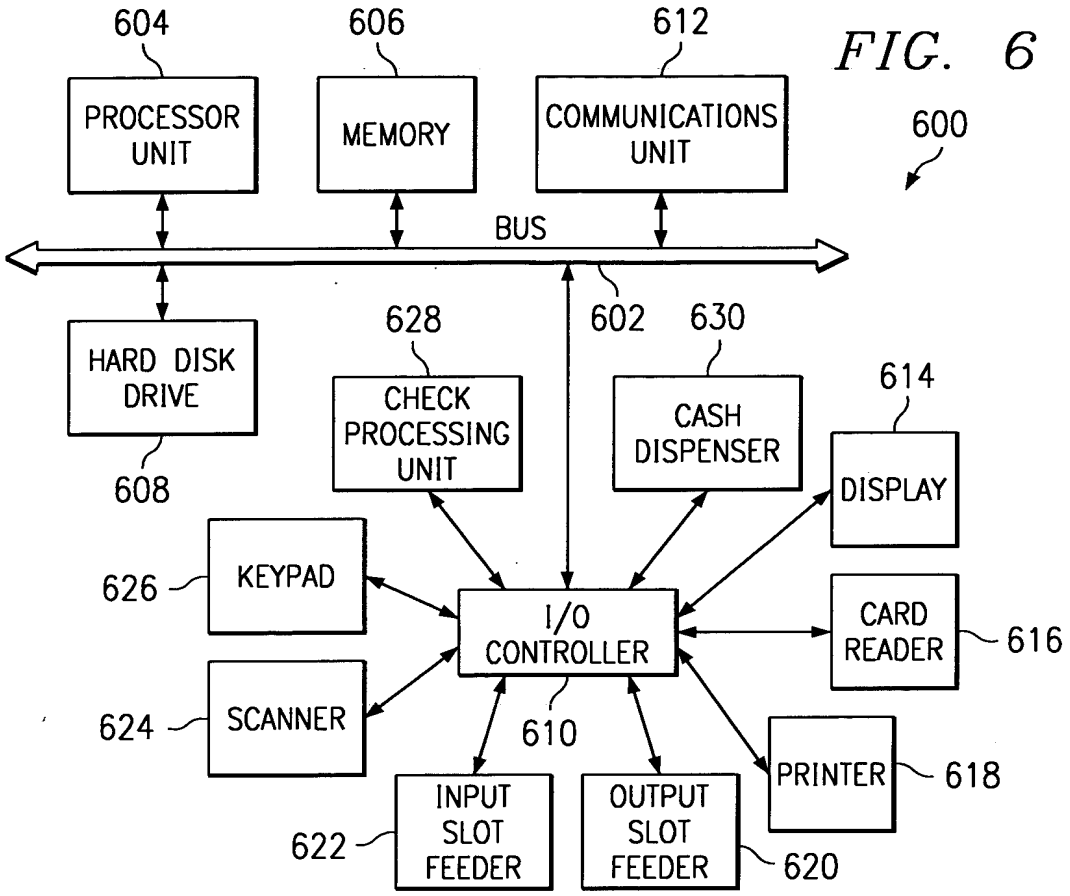

604
606
612
PROCESSOR UNIT
MEMORY
COMMUNICATIONS UNIT
600
BUS
602
628
630
614
HARD DISK DRIVE
608
CHECK PROCESSING UNIT
CASH DISPENSER
DISPLAY
626
KEYPAD
I/O CONTROLLER
CARD READER
616
624
SCANNER
610
PRINTER
618
622
INPUT SLOT FEEDER
OUTPUT SLOT FEEDER
620

FIG. 6

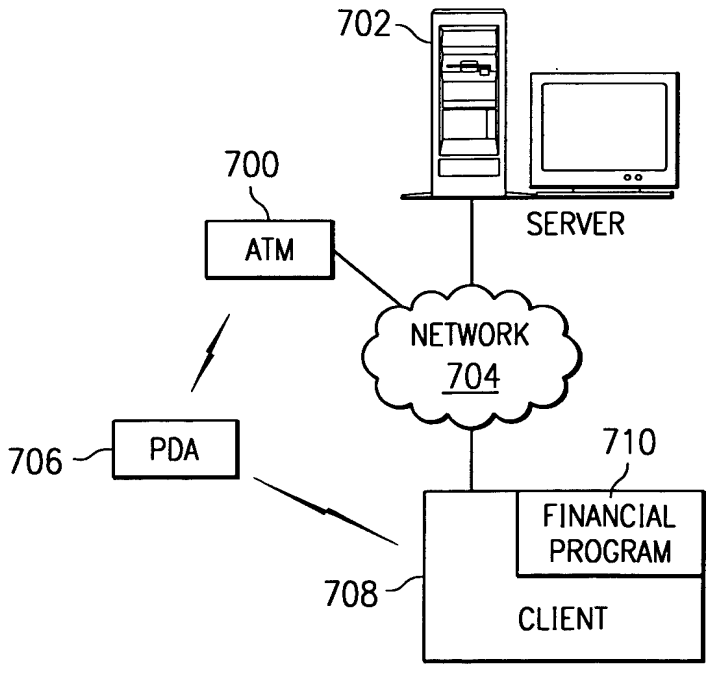

702
700
SERVER
ATM
NETWORK
704
706
PDA
710
FINANCIAL PROGRAM
708
CLIENT

FIG. 7

FIG. 8

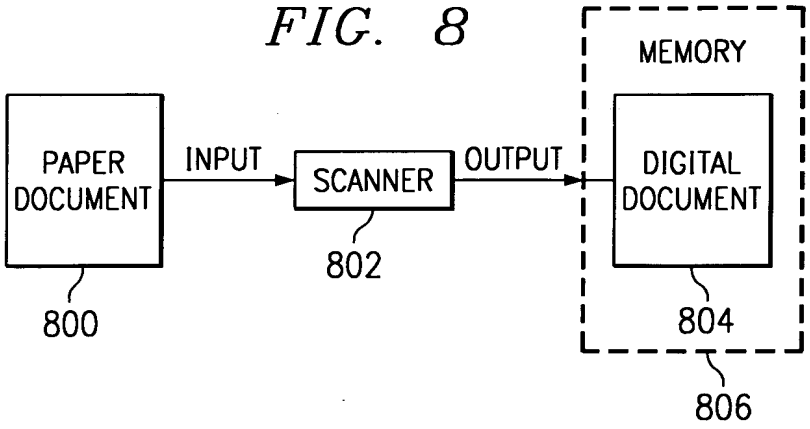


FIG. 9

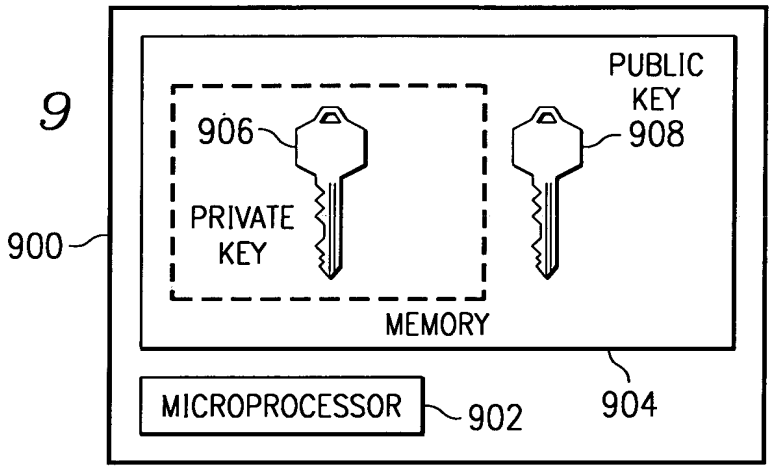


FIG. 10

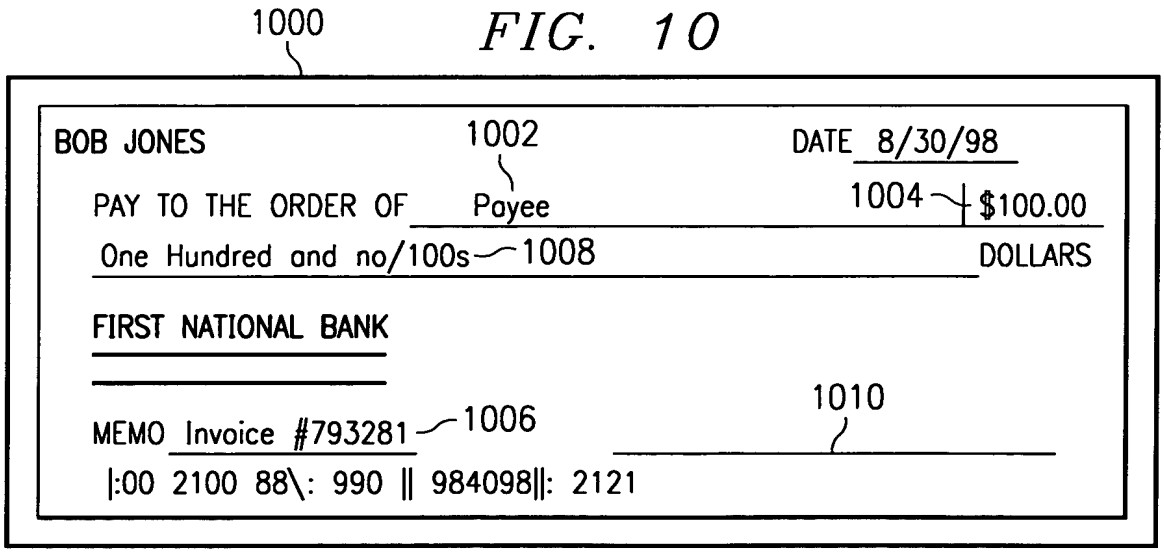


FIG. 11

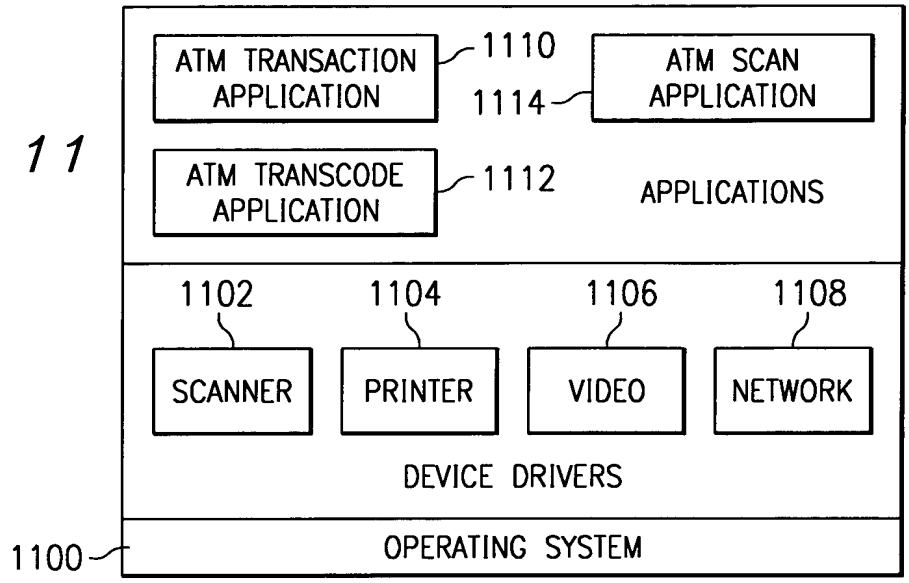


FIG. 19

1900

!Type: CheckImage 1902
D 6/12/00 (date deposited at ATM) 1904
T 17:36:01 GMT (time check deposited at ATM) 1906
X 539262521 (transaction number at ATM) 1908
M 53721 (ATM number) 1910
B 5367821 (Bank of entity owning ATM) 1912
F <header data for image> (front of check image) 1914
<image of front of check>
B <header data for image> (back of check image) 1916
<image of back of check>
.
.
.<optional other data> (check data)
.
.
.
~ (end)

Note: ( ) areas are comments

1200

FIG. 12A

```
<fsml-doc docname="echeck187" type="check">
<action>
<blkname>act1
<crit>true
<vers>1.0
<function>payment
<reason>process
</action>
<check>
<blkname>check2>
<crit>true
<vers>1.0
<checkdata>
<checksum>187
<dateissued>19970519
<datevalid>19970519
<country>us
<amount>1000000.00
<currency>usd
<payto>Chili Pepper
</checkdata>
<checkbook>2048
<legalnotice>This instrument subject to check law
</check>
<signature>
<blkname>sig7
<crit>true
<vers>1.5
<sigdata>
<blockref>act1
<hash alg="sha">J4t/NI7s44lqSMTR1/1bkgABwug=
<blockref>check2
<hash alg="sha">vFns/1Vm9QaRDFAgtijkE24cazk=
<blockref>acct-111111111-00000001
<hash alg="sha".f51C8MWtSVgeCQPOmzDTBjy1Zg=
<nonce>9D9BC5AA75
</cert>
<signature>
<blkname>banksig6
```

FIG. 12B

1200

```
<crit>true
<vers>1.5
<sigdata>
<blockref>acct-111111111-00000001
<hash alg="sha">fF51C8MwtSVgeCQPOmzDTBjy1zg=
<blockref>cert-111111111-00000001
<hash alg="sha">1xzwMBQg7/rXMxC8k79xyotRTVY=
<nonce>9D9BC5AA75
<sigref>cert-111111111
<sigtype>bankacct
<algorithm>sha/dsa
<location>us
</sigdata>
<sig>
JInh43b1zYlydAELCmAo6j8nY/
I=:mBnAYXvAB7Pm+EWU865jIQvEr7A=
</signature>
<cert>
<blkname>cert-1111111
<crit>true
<vers>1.0
<certtype>x509v1
<certissuer>/C=US/ST=MD/O=FSTC/OU=checking CA/
<certserial>1
<certdata>
</cert>
</fsml-doc>
```

FIG. 13

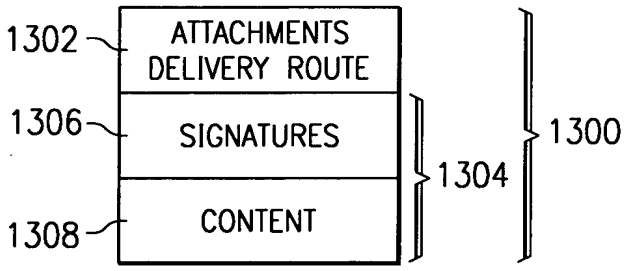


FIG. 14

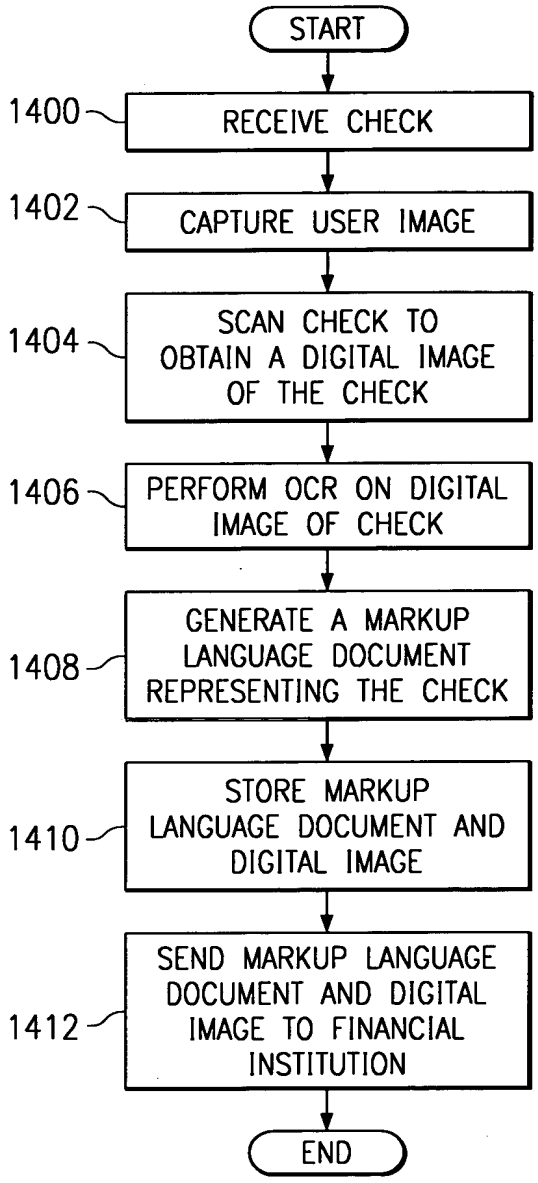

START
1400
RECEIVE CHECK
1402
CAPTURE USER IMAGE
1404
SCAN CHECK TO OBTAIN A DIGITAL IMAGE OF THE CHECK
1406
PERFORM OCR ON DIGITAL IMAGE OF CHECK
1408
GENERATE A MARKUP LANGUAGE DOCUMENT REPRESENTING THE CHECK
1410
STORE MARKUP LANGUAGE DOCUMENT AND DIGITAL IMAGE
1412
SEND MARKUP LANGUAGE DOCUMENT AND DIGITAL IMAGE TO FINANCIAL INSTITUTION
END

FIG. 15

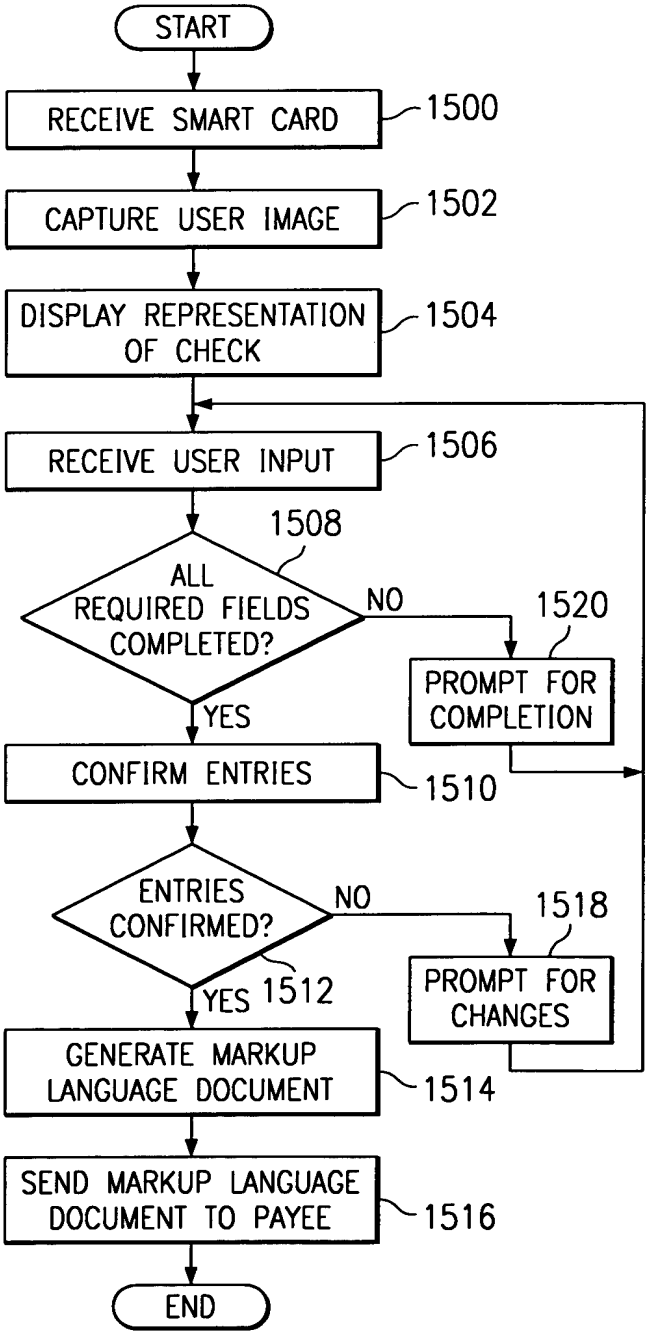

START
RECEIVE SMART CARD
1500
CAPTURE USER IMAGE
1502
DISPLAY REPRESENTATION OF CHECK
1504
RECEIVE USER INPUT
1506
1508
ALL REQUIRED FIELDS COMPLETED?
NO
1520
PROMPT FOR COMPLETION
YES
CONFIRM ENTRIES
1510
ENTRIES CONFIRMED?
NO
1518
PROMPT FOR CHANGES
YES
1512
GENERATE MARKUP LANGUAGE DOCUMENT
1514
SEND MARKUP LANGUAGE DOCUMENT TO PAYEE
1516
END

FIG. 16

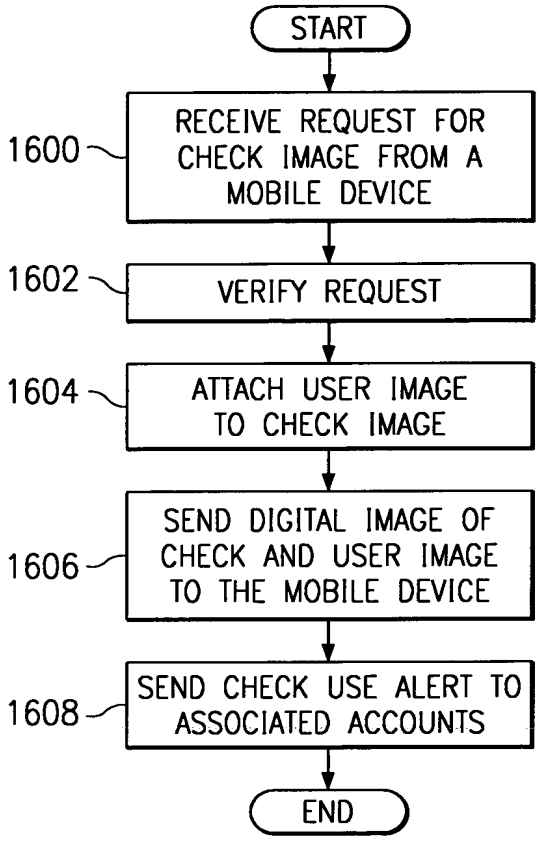


FIG. 17

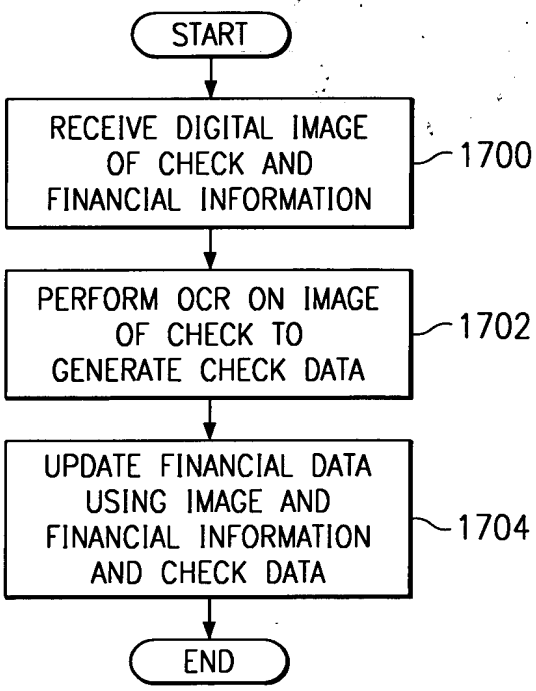


FIG. 18

1800 1802

Header	Type of data
!Type:Bank	Bank account transactions
!Type:Cash	Cash account transactions
!Type:CCard	Credit card account transactions
!Type:Invst	Investment account transactions
!Type:Oth A	Asset account transactions
!Type:Oth L	Liability account transactions
!Account	Account list or which account follows
!Type:Cat	Category list
!Type:Class	Class list
!Type:Memorized	Memorized transaction list
!Type: CheckImage	Check image

1804

1806